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Atty. Dkt. No. 063391-1802

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Campbell et al.
Title: Acyl-Nucleotide Probes And
Methods Of Their Synthesis And
Use In Proteomic Analysis

Appl. No.: 10/817,454

Filing Date: 04/01/2004

Examiner:

Art Unit:

<p align="center">CERTIFICATE OF MAILING</p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below.</p> <p align="center"><u>DIANE GARCIA</u> (Printed Name)</p> <p align="center"><u>Diane Garcia</u> (Signature)</p> <p align="center"><u>7-14-04</u> (Date of Deposit)</p>

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Mail Stop Amendment (IDS)
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document, except as noted below, is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The USPTO has waived the requirement under 37 CFR 1.98(a)(2)(i) to submit copies of U.S. patents and U.S. patent application publications when citing and submitting an Information Disclosure Statements in a patent application filed after June 30, 2003 and in an international application that has entered the national stage under 37 USC §371 after June 30, 2003. Accordingly, copies of these types of documents are not being supplied in connection with this application. Reference is being made to Pre-OG Notice from Office of Patent Legal Administration dated July 25, 2003, *Information Disclosure Statements May Be Filed Without*

Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even

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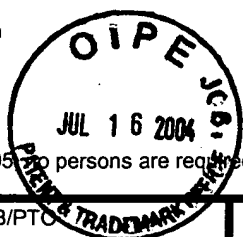
Respectfully submitted,

Date 14 July 2004

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MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/817,454
Filing Date	04/01/2004
First Named Inventor	David Alan Campbell
Group Art Unit	
Examiner Name	
Attorney Docket Number	063391-1802

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	4,415,655		De Castro et al.	11-15-1983	
	A2	4,481,094		Fernandez de Castro et al.	11-06-1984	
	A3	4,865,707		Karger et al.	09-12-1989	
	A4	4,946,794		Berube	08-07-1990	
	A5	5,215,970		Datema et al.	06-01-1993	
	A6	6,008,373		Waggoner et al.	12-28-1999	
	A7	6,043,060		Imanishi	03-28-2000	
	A8	6,255,292		Liang	07-03-2001	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A9	WO	00/011208		University of Washington	03-02-2000		
	A10	WO	01/77668		The Scripps Research Institute	10-18-2001		
	A11	WO	01/77684		The Scripps Research Institute	10-18-2001		
	A12	WO	03/079014		Pharmacia Groningen BV	01-30-2003		

NON PATENT LITERATURE DOCUMENTS

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	A13	Bergseid et al., Small molecule-based chemical affinity system for the purification of proteins. Biotechniques (2000) 29(5):1126-1133	
	A14	Bishop et al., Magic bullets for protein kinases. Trends Cell Biol (2001) 11(4):167-172	

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				Application Number	10/817,454
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				First Named Inventor	David Alan Campbell
				Group Art Unit	
Examiner Name					
Sheet	2	of	4	Attorney Docket Number	063391-1802

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	A15	Clauser, et al., Rapid mass spectrometric peptide sequencing and mass matching for characterization of human melanoma proteins isolated by two-dimensional PAGE. <i>Proc. Natl. Acad. Sci. USA</i> (1995) 92:5072-76		
	A16	Daniel, SM et al., FastTag™ Nucleic Acid Labeling System: A Versatile Method for Incorporating Haptens, Fluorochromes and Affinity Ligands into DNA, RNA and Oligonucleotides. <i>Biotechniques</i> (1998) 24(3), 484-489		
	A17	De Leenheer, et al., Applications of isotope dilution-mass spectrometry in clinical chemistry, pharmacokinetics, and toxicology. <i>Mass Spectrom. Rev.</i> (1992) 11:249-307		
	A18	Deutscher (ed.), <i>Methods in Enzymology</i> , (1990) vol. 182, pp. 147-238, chapter 12 by Cull and McHenry entitled "Preparation of extracts from Prokaryotes."		
	A19	Eisen et al., Cluster analysis and display of genome-wide expression patterns. <i>Proc. Natl. Acad. Sci. USA</i> (1998) 95:14863-14868		
	A20	Eng. et al. An Approach to Correlate Tandem Mass Spectral Data of Peptides with Amino Acid Sequences in a Protein Database. <i>J. Am. Soc. Mass Spectrom.</i> (1994) 5:976-989		
	A21	Gibson et al., Nonpeptidic $\alpha_v\beta_3$ Integrin Antagonist Libraries: On-Bead Screening and Mass Spectrometric Identification without Tagging. <i>Agnew. Chem. Int. Ed.</i> (2001) 40: 165-169.		
	A22	Gottschling et al., Cellular Solid-Phase Binding Assay and Mass Spectrometry for Screening of $\alpha_4\beta_7$ Integrin Antagonists. <i>Bioorg. And Medicinal Chem. Lett.</i> (2001) 11: 2997		
	A23	Gygi et al., Protein analysis by mass spectrometry and sequence database searching: Tools for cancer research in the post-genomic era. <i>Mol. Cell. Biol.</i> (1999) 19:1720-1730		
	A24	Gygi, et al., Correlation between Protein and mRNA Abundance in Yeast. <i>Mol. And Cell. Biol.</i> (1999) 20:310-319		

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	A25	Hanks and Hunter, "The eukaryotic protein kinase superfamily: kinase (catalytic) domain structure and classification." <i>FASEB J.</i> (1995) 9(8):576-596	
	A26	Kidd <i>et al.</i> , Profiling Serine Hydrolase Activities in Complex Proteomes. <i>Biochemistry</i> (2001) 40: 4005-15	
	A27	Kolb <i>et al.</i> , Click Chemistry: Diverse Chemical Function from a Few Good Reactions. <i>Agnew Chem. Int. Ed. Engl.</i> (2001) 40: 2004-21	
	A28	Laemmli, Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4. <i>Nature</i> (1970) 227:680-685	
	A29	Lemieux <i>et al.</i> A Fluorogenic Dye Activated by the Staudinger Ligation. <i>J. Am. Chem. Soc.</i> (2003) 125: 4708-4709	
	A30	Leon <i>et al.</i> , Evaluation of Resins for On-Bead Screening: A Study of Papain and Chymotrypsin Specificity Using Pega-Bound Combinatorial Peptide Libraries. <i>Bioorg. Med. Chem. Lett.</i> (1998) 8: 2997	
	A31	Link, <i>et al.</i> , Identifying the major proteome components of <i>Haemophilus influenzae</i> type-strain NCTC 8143. <i>Electrophoresis</i> (1997) 18:1314-34	
	A32	Mann and Wilm, Error-Tolerant Identification of Peptides in Sequence Databases by Peptide Sequence Tags. <i>Anal. Chem.</i> (1994) 66:4390-99	

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Sheet	4	of	4

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	A33	Orain and Bradley, Solid phase synthesis of trypanothione reductase inhibitors-towards single bead screening. Tetrahedron Lett. (2001) 42: 515-518	
	A34	Papanikos et al., α -Ketocarbonyl Peptides: A General Approach to Reactive Resin-Bound Intermediates in the Synthesis of Peptide Isosteres for Protease Inhibitor Screening on Solid Support. J. Am. Chem. Soc. (2001) 123: 2176 2181	
	A35	Porco, Organic Synthesis Using Chemical Tags: The "Third Leg" of Parallel Synthesis. JA Comb. Chem. High Throughput Screening (2000) 3(2) 93-102	
	A36	Ross et al., Systematic variation in gene expression patterns in human cancer cell lines. Nat. Genet. (2000)24:227-235	
	A37	Seo et al., Click Chemistry to Construct Fluorescent Oligonucleotides for DNA Sequencing. J. Org. Chem. (2003) 68: 609-612	
	A38	Smith and Bradley, Comparison of Resin and Solution Screening of Methodologies in Combinatorial Chemistry and the Identification of a 100nM Inhibitor of Trypanothione Reductase. J. Comb. Med. (1999) 1: 326-332.	

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